incomplete, such a work is useful, and the *Natural Science Association* have done well to print it.

The arrangement is by subjects: *Points and Coves*, *Necks*, etc., but without regard to alphabetical order, so that in consulting the book every entry in a particular section must be read. The Dutch names are less numerous than might be expected, though some forms, apparently English, are no doubt corruptions or translations of Dutch originals.

In many cases Mr. Davis has given the history, or what is locally accepted as the history, of the names.

In the map, which is on the scale of 1¾ inches to the mile, the old and the new names of places are printed side by side.

L'Heure Décimale et la Division de la Circonférence. Par Henri de Sarrauton. Oran, 1896. (*Société de Géographie et d'Archéologie de la Province d'Oran.*)

M. de Sarrauton calls attention, at the beginning of his scientific paper, to this shocking anomaly: Time is measured by hours, which belong to the duodecimal system; by minutes and seconds, which are sexagesimal; and by decimal sub-multiples of the second, the use of the thirds having been abandoned.

The division of the circumference into 360 degrees presents the same inconveniences.

The author recognizes the fact that the decimal numeration is not by any means the best that can be employed, and that two others, at least, are to be preferred to it; the duodecimal, with 12 for its base, and the sexadecimal, with 16 for a base.

He admits the possibility that, in four or five centuries, the decimal numeration may give way to the duodecimal, and that this in its turn, if humanity continues its progressive evolution, may in four or five thousand years give way to the sexadecimal. For the present, however, the decimal system is in force, and the problem is how to extend it to the measurement of time and of angles.

The division of the day into 24 hours antedates history and prevails over all the earth. A day of 20 hours, or one of 10 hours, is not to be thought of, though the latter, employed by Laplace in his *Mécanique Céleste*, was actually ordained by a decree of the National Convention.

M. de Sarrauton establishes two premises:

1.—We are obliged to accept the decimal numeration, although it is not the best possible, because it is admitted throughout the world.

2.—And we are obliged to accept the division of the day into 24 hours for the same reason, and also for another, because it is excellent.

It follows that, in order to apply the decimal system to time, the hour must be taken as the unit, divided into 100 minutes, and each minute divided into 100 seconds. The hours would be counted, in this rearrangement, from 1 to 24.

As regards the measurement of angles, M. de Sarrauton would simplify it, after analyzing the two divisions of the circumference now in use (that of 360 degrees and that of 400 degrees), by the division into 240 degrees. This reform, so far as the purposes of the navigator and the geographer are concerned, may be regarded as perfect. The taking of the longitude becomes a simple matter, as this example shows:

The longitude of Gorée, in time, west of Paris, is 1h. 17m. 59s. Translated into decimal time, this becomes $1^{h}.299,721$. Multiplied by 10, it gives $12°.9572$, the longitude of Gorée in the division into 240 degrees.

The Oran Geographical Society has adopted the conclusions of this logical paper and invites the cöperation of other geographical societies in advocating the proposed reform.

La Découverte du Pôle Nord. Par Eugène Payart. (*Extrait des Comptes-rendus du Sixième Congrès International de Géographie tenu à Londres en Juillet, 1895.*) *Reprint.*

M. Payart's plan, evolved from long study of the history and the conditions of Arctic exploration, recommends itself by its simplicity and its international character. It contemplates the despatch of simultaneous expeditions through two consecutive years, from several nearly equidistant points of a circle, towards the north pole as a centre.

These expeditious to be supported by international contributions.

The farther north they went, the nearer would the exploring parties be to each other for support, in case of need, the distance between the meridians decreasing with the approach to the pole. This distance, which in 75° latitude is 15.5 geog. miles, is only 10.4 miles in latitude 80°, 5.2 miles in latitude 85°, and 3.1 miles in 87° latitude.

M. Payart indicates the following points of departure:
Jan Mayen, or the northern coast of Norway.
Kara Strait, or the mouth of the Petchora or Yenisei.
The mouth of the Lena.
Wrangel Land, or Bering Strait.
Cape Bathurst, or the mouth of the Mackenzie.
A port in Baffin's Bay, on the coast of Greenland.